



#3

OIPE

## RAW SEQUENCE LISTING

DATE: 04/16/2002

PATENT APPLICATION: US/09/852,416

TIME: 16:00:02

Input Set : N:\Crf3\RULE60\09852416.raw

Output Set: N:\CRF3\04162002\I852416.raw

ENTERED

1 <110> APPLICANT: PKhosla, Chaitan  
2 Ashley, Gary  
3 Fu, Hong  
4 Kao, Camilla M.  
5 McDaniel, Robert  
6 <120> TITLE OF INVENTION: COMBINATORIAL POLYKETIDE LIBRARIES  
7 PRODUCED USING A MODULAR PKS GENE CLUSTER AS SCAFFOLD  
8 <130> FILE REFERENCE: 30062-20005.02  
9 <140> CURRENT APPLICATION NUMBER: 09/852,416  
10 <141> CURRENT FILING DATE: 2001-05-09  
12 <150> PRIOR APPLICATION NUMBER: 09/859,854  
13 <151> PRIOR FILING DATE: 2001-05-16  
16 <150> PRIOR APPLICATION NUMBER: PCT/US98/08792  
17 <151> PRIOR FILING DATE: 1998-04-30  
18 <150> PRIOR APPLICATION NUMBER: 60/076,919  
19 <151> PRIOR FILING DATE: 1998-03-05  
20 <150> PRIOR APPLICATION NUMBER: 08/846,247  
21 <151> PRIOR FILING DATE: 1997-04-30  
22 <150> PRIOR APPLICATION NUMBER: 08/486,645  
23 <151> PRIOR FILING DATE: 1995-06-07  
24 <150> PRIOR APPLICATION NUMBER: 08/238,811  
25 <151> PRIOR FILING DATE: 1994-05-06  
26 <160> NUMBER OF SEQ ID NOS: 44  
27 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
29 <210> SEQ ID NO: 1  
30 <211> LENGTH: 24  
31 <212> TYPE: DNA  
32 <213> ORGANISM: Artificial Sequence  
33 <220> FEATURE:  
34 <223> OTHER INFORMATION: Module 1 - A BamHI site engineered for the 5'  
35 boundary of the acyltransferase domain.  
36 <400> SEQUENCE: 1  
37 ggcgcagcagg gatccgtctt cgtc 24  
39 <210> SEQ ID NO: 2  
40 <211> LENGTH: 24  
41 <212> TYPE: DNA  
42 <213> ORGANISM: Artificial Sequence  
43 <220> FEATURE:  
44 <223> OTHER INFORMATION: Module 1 - A PstI site engineered for introduction  
45 between the acyltransferase and reductive domains.  
46 <400> SEQUENCE: 2  
47 cgcgtctgga tgcagccgaa gccg 24  
49 <210> SEQ ID NO: 3

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50 <211> LENGTH: 24
51 <212> TYPE: DNA
52 <213> ORGANISM: Artificial Sequence
53 <220> FEATURE:
54 <223> OTHER INFORMATION: Module 1 - A XbaI site engineered for introduction
55   at the 3' end of the reductive domain.
56 <400> SEQUENCE: 3
57   gcgcgggtga gatctaagcc ggcc
59 <210> SEQ ID NO: 4
60 <211> LENGTH: 24
61 <212> TYPE: DNA
62 <213> ORGANISM: Artificial Sequence
63 <220> FEATURE:
64 <223> OTHER INFORMATION: Module 2 - A BamHI site engineered for the 5'
65   boundary of the acyltransferase domain.
66 <400> SEQUENCE: 4
67   tccgacggtg gatccgtggt cgtc
69 <210> SEQ ID NO: 5
70 <211> LENGTH: 24
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
73 <220> FEATURE:
74 <223> OTHER INFORMATION: Module 2 - A PstI site engineered for introduction
75   between the acyltransferase and reductive domains.
76 <400> SEQUENCE: 5
77   cggttctggc tgcagccgga ccgc
79 <210> SEQ ID NO: 6
80 <211> LENGTH: 24
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Module 2 - A XbaI site engineered for introduction
85   at the 3' end of the reductive domain.
86 <400> SEQUENCE: 6
87   gtcggccaga gatctcgaga ggca
89 <210> SEQ ID NO: 7
90 <211> LENGTH: 24
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: Module 3 - A BamHI site engineered for the 5'
95   boundary of the acyltransferase domain.
96 <400> SEQUENCE: 7
97   gacgggcgcg gatccgtctt cctg
99 <210> SEQ ID NO: 8
100 <211> LENGTH: 24
101 <212> TYPE: DNA
102 <213> ORGANISM: Artificial Sequence
103 <220> FEATURE:

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104 <223> OTHER INFORMATION: Module 3 - A PstI site engineered for introduction
105     between the acyltransferase and reductive domains.
106 <400> SEQUENCE: 8
107     cgctactggc tgcagcccgcg cgca                                24
109 <210> SEQ ID NO: 9
110 <211> LENGTH: 24
111 <212> TYPE: DNA
112 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Module 3 - A XbaI site engineered for introduction
115     at the 3' end of the reductive domain.
116 <400> SEQUENCE: 9
117     ctcggcaaca gatctgagcg gccca                                24
119 <210> SEQ ID NO: 10
120 <211> LENGTH: 24
121 <212> TYPE: DNA
122 <213> ORGANISM: Artificial Sequence
123 <220> FEATURE:
124 <223> OTHER INFORMATION: Module 4 - A BamHI site engineered for the 5'
125     boundary of the acyltransferase domain.
126 <400> SEQUENCE: 10
127     gcgccgcgcg gatccgtcct ggtc                                24
129 <210> SEQ ID NO: 11
130 <211> LENGTH: 24
131 <212> TYPE: DNA
132 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: Module 4 - A PstI site engineered for introduction
135     between the acyltransferase and reductive domains.
136 <400> SEQUENCE: 11
137     cgcttctggc tgcagcccgca ccgg                                24
139 <210> SEQ ID NO: 12
140 <211> LENGTH: 24
141 <212> TYPE: DNA
142 <213> ORGANISM: Artificial Sequence
143 <220> FEATURE:
144 <223> OTHER INFORMATION: Module 4 - A XbaI site engineered for introduction
145     at the 3' end of the reductive domain.
146 <400> SEQUENCE: 12
147     ctcggccaga gatctcaagc cggg                                24
149 <210> SEQ ID NO: 13
150 <211> LENGTH: 24
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Module 5 - A BamHI site engineered for the 5'
155     boundary of the acyltransferase domain.
156 <400> SEQUENCE: 13
157     actcgccgcg gatccgcgat ggtg                                24

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159 <210> SEQ ID NO: 14
160 <211> LENGTH: 24
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial Sequence
163 <220> FEATURE:
164 <223> OTHER INFORMATION: Module 5 - A PstI site engineered for introduction
165     between the acyltransferase and reductive domains.
166 <400> SEQUENCE: 14
167     cggtagctggc tgcagatccc cacc                24
169 <210> SEQ ID NO: 15
170 <211> LENGTH: 24
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Module 5 - A XbaI site engineered for introduction
175     at the 3' end of the reductive domain.
176 <400> SEQUENCE: 15
177     gacccgctca gatctcggga ggag                24
179 <210> SEQ ID NO: 16
180 <211> LENGTH: 24
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: Module 6 - A BamHI site engineered for the 5'
185     boundary of the acyltransferase domain.
186 <400> SEQUENCE: 16
187     tccgccggcg gatccgtttt cgtc                24
189 <210> SEQ ID NO: 17
190 <211> LENGTH: 24
191 <212> TYPE: DNA
192 <213> ORGANISM: Artificial Sequence
193 <220> FEATURE:
194 <223> OTHER INFORMATION: Module 6 - A PstI site engineered for introduction
195     between the acyltransferase and reductive domains.
196 <400> SEQUENCE: 17
197     cggtagctggc tgcagccgga ggtg                24
199 <210> SEQ ID NO: 18
200 <211> LENGTH: 24
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: Module 6 - A XbaI site engineered for introduction
205     at the 3' end of the reductive domain.
206 <400> SEQUENCE: 18
207     gacgtggcga gatctccggg ggtg                24
209 <210> SEQ ID NO: 19
210 <211> LENGTH: 23
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence

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213 <220> FEATURE:
214 <223> OTHER INFORMATION: A PstI site that is in-frame and upstream of XbaI
215     in pUC19 that generates this junction at the 5'
216     end of the cassette.
217 <400> SEQUENCE: 19
218     ctgcaggctcg actctagcct ggt                                     23
220 <210> SEQ ID NO: 20
221 <211> LENGTH: 27
222 <212> TYPE: DNA
223 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Module rapAT2 (forward) Primer pairs used for PCR
226     amplification of rapamycin PKS cassettes.
227 <400> SEQUENCE: 20
228     tttagatctg tgttcgtctt cccgggt                                   27
230 <210> SEQ ID NO: 21
231 <211> LENGTH: 36
232 <212> TYPE: DNA
233 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Module rapAT2 (reverse) Primer pairs used for PCR
236     amplification of rapamycin PKS cassettes.
237 <400> SEQUENCE: 21
238     tttctgcagc cagtaccgct ggtgctggaa ggcgta                       36
240 <210> SEQ ID NO: 22
241 <211> LENGTH: 33
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <223> OTHER INFORMATION: Module rapAT14 (forward) Primer pairs used for PCR
246     amplification of rapamycin PKS cassettes.
247 <400> SEQUENCE: 22
248     tttggatccg ccttctgttt cgacgggcaa ggc                           33
250 <210> SEQ ID NO: 23
251 <211> LENGTH: 33
252 <212> TYPE: DNA
253 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <223> OTHER INFORMATION: Module rapAT14 (reverse) Primer pairs used for PCR
256     amplification of rapamycin PKS cassettes.
257 <400> SEQUENCE: 23
258     tttctgcagc cagtaggact ggtgctggaa cgg                           33
260 <210> SEQ ID NO: 24
261 <211> LENGTH: 36
262 <212> TYPE: DNA
263 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
265 <223> OTHER INFORMATION: Module rapKR2 (forward) Primer pairs used for PCR
266     amplification of rapamycin PKS cassettes.

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/852,416

DATE: 04/16/2002

TIME: 16:00:03

Input Set : N:\Crf3\RULE60\09852416.raw

Output Set: N:\CRF3\04162002\I852416.raw